

291

6.1 HW Key p291

14, 16, 22

33-38

14. $f(x) = 2x^2$

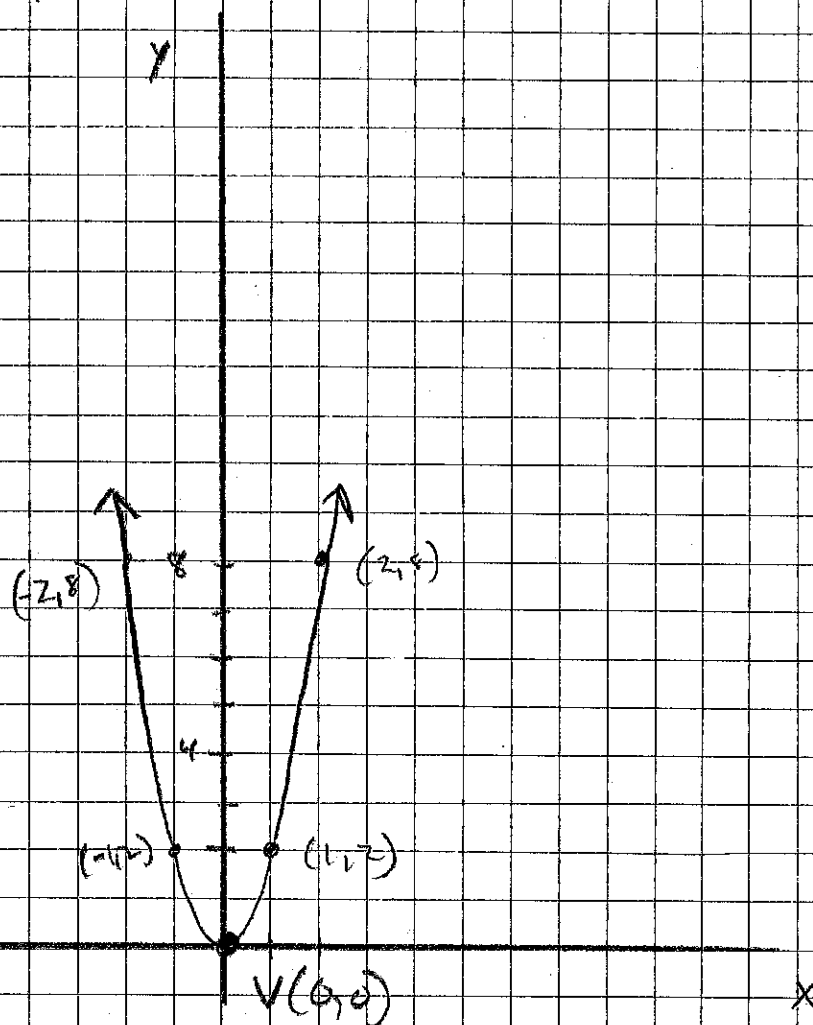
$V(0,0)$

a.o.s $x=0$

y-int $(0,0)$

$(1,2)$ $(-1,2)$

$(2,8)$ $(-2,8)$



16. $f(x) = x^2 + 4$

y

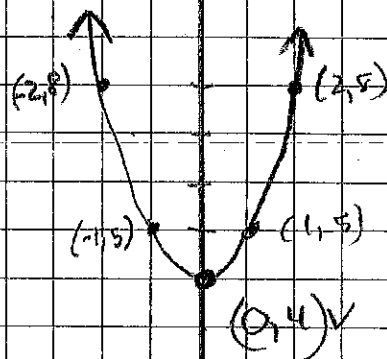
$V(0,4)$

a.o.s $x=0$

y-int $(0,4)$

$(1,5)$ $(-1,5)$

$(2,8)$ $(-2,8)$



$$22. f(x) = x^2 - 4x - 5$$

$$4 - 9 = -5$$

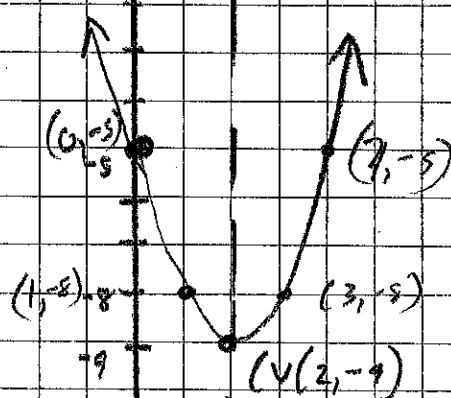
$$\frac{4}{2(1)}$$

$$V(2, -9)$$

$$a.o.s \quad x=2$$

$$y\text{-int } (0, -5) \quad (4, -5)$$

$$(3, -8) \quad (1, -8)$$



33-38

$$33. f(x) = -x^2 - 9$$

$$\max; -9$$

$$\frac{-b}{2a} = 0$$

$$34. f(x) = x^2 - 8x + 2$$

$$\min; -14$$

$$\frac{-b}{2a} = \frac{8}{2} = 4$$

$$16 - 32 + 2$$

$$35. f(x) = x^2 + 6x - 2$$

$$\min; -11$$

$$\frac{-b}{2a} = \frac{-6}{2} = -3$$

$$9 - 18 - 2$$

$$38. f(x) = 2x + 2x^2 + 5$$

$$\min; 4\frac{1}{2}$$

$$\frac{-2}{4} = \frac{-1}{2}$$

$$-1 + \frac{1}{2} + 5$$

$$36. f(x) = 4x - x^2 + 1$$

$$\max; 5$$

$$\frac{-b}{2a} = \frac{-4}{-2} = 2$$

$$8 - 4 + 1$$

$$37. f(x) = 3 - x^2 - 6x$$

$$\max; 12$$

$$\frac{6}{-2} = -3$$

$$3 - 9 + 18$$